REMARKS

Re-examination and allowance of the present application is respectfully requested.

Initially, Applicants note that the Examiner has returned copies of the PTO-1449 Forms that accompanied Information Disclosure Statements that Applicants filed on November 20, 2001 and October 9, 2002. However, the returned second page of the PTO-1449 Form that accompanied the November 20, 2001 Information Disclosure Statement, and the returned PTO-1449 Form that accompanied the October 9, 2002 Information Disclosure Statement were not initialed and completed by the Examiner to confirm his consideration of the submitted materials. Accordingly, the Examiner is respectfully requested to complete the PTO-1449 Forms and to return completed copies to Applicants to confirm the Examiner's consideration of all the materials submitted by Applicants.

Applicants also thank the Examiner for indicating that claims 7, 8, 11, 32, 33 and 36-38 contain allowable subject matter and that these claims would be allowable if they are amended to be placed into independent form. By the current amendment, Applicants amend claims 7, 8, 11 to place them in independent form as new claims 46-48, and to amend claims 32 and 36 to place them into independent form. These claims have been drafted to include substantially all the limitations of their respective base claim and intervening claims (if any). Accordingly, the Examiner is respectfully requested to indicate the allowability of claims 32, 33, 36-38 and 46-48.

Claims 12 and 42 stand rejected under 35 U.S.C. §112, second paragraph, on the ground that the claims are not clear and definite. By the current amendment, Applicants amend the claims, paying particular attention to the concerns raised by the Examiner. In view of the current amendment, Applicants submit that the ground for this rejection no longer exists, and respectfully requests withdrawal of this ground of rejection.

Applicants respectfully traverse the Examiner's 35 U.S.C. §102(e) rejection of claims 1-3, 5, 6, 9, 10, 12-31, 34, 35 and 39-45 as being anticipated by U.S. Patent 6,369,781 to HASHIMOTO et al.

According to a feature of the present invention, a driving pulse is applied to a discharge cell to induce a first discharge. The voltage of the driving pulse is increased after a voltage of the identical driving pulse is reduced, so as to induce a second discharge subsequent to the first discharge. That is, the first and second discharges are induced by an identical driving voltage, and not by separate pulses. Applicants submit that at least this feature is lacking from HASHIMOTO.

In this regard, Applicants are unclear as to which pulse in HASHIMOTO the Examiner is designating as the first voltage and the second voltage. Applicants believe that the Examiner considers the discharge induced by the pulse applied to the x electrode to correspond to Applicants' first discharge, and the discharge induced by the pulse applied to the y electrode as corresponding to Applicants' second discharge. However, as indicated

above, Applicants do not employ separate pulses. Rather, as discussed above, the first and second discharges are induced by an identical driving voltage.

By the current amendment, Applicants amend the claims to clarify this feature. In view of this amendment to the claims, Applicants submit that the present invention, as defined by the pending claims, is not anticipated by HASHIMOTO, and respectfully requests such an indication from the Examiner.

With respect to the rejection of claim 3, the Examiner asserts that the applied art teaches that the interval between the second assistant pulse Subp2 and the erase pulse Exp should be as short as possible, namely, not less than 100 ns and not more than 550 ns. Applicants submit that this assertion is incorrect.

A review of HASHIMOTO discloses that it refers to Japanese document 8-3144045. Figs. 24 of HASHIMOTO illustrate waveforms of Japanese document 8-3144045. In Fig, 24(C), an effective voltage having two peaks is shown. The interval between the two peaks correspond to an idle period TS2 between the driving voltage applied to the x electrode (shown in Fig. 24(A)) and the driving voltage applied to the y electrode (shown in Fig. 24(B)). A review of paragraph 0031 of Japanese document 8-3144045 discloses that the idle period TS2 is of the order of 1 to 1.5 microseconds. Applicants submit that this differs from Applicants' invention, in which the interval between the peak of two discharges are set to be not less than 100 nanosecond nor more than 550 nanoseconds.

By the current amendment, Applicants further amend independent claims 1 and 39 to include the feature of original claim 3 to clarify the time interval between peaks. As this feature is neither disclosed or suggested by the applied art of record, Applicants submit that an additional ground exists for concluding the allowability of independent claims 1 and 39, along with their associated dependent claims.

The Examiner further asserts that the control circuit 40C of HASHIMOTO corresponds to Applicants' detection circuit, recited in claims 14 and 43, that detect a lighting rate of the discharge cells which are simultaneously turned on out of the plurality of discharge cells. Applicants respectfully traverse this assertion. Applicants submit that HASHIMOTO fails to describe detecting the lighting rate of the discharge cells which are simultaneously turned on out of the plurality of discharge cells to control the driving pulse, based on the detected lighting rate, as required by Applicants' claimed invention. Accordingly, Applicants submit that independent claims 14 and 43 (along with their respective dependent claims) are not anticipated by HASHIMOTO, and respectfully requests withdrawal of this ground of rejection.

Applicants wish to clarify the record with respect to the basis for the patentability of claims in the present application. While Applicant does not disagree with the Examiner's indication that certain identified features are not disclosed by the references, as noted by the Examiner, Applicants further wish to clarify that the claims in the present application recite

a combination of features, and the basis for patentability of these claims is based on the totality of the features recited therein.

SUMMARY AND CONCLUSION

In view of the fact that the art of record, whether considered alone or in combination, fails to disclose or suggest the present invention, as defined by the pending claims, and in further view of the above amendments and remarks, reconsideration of the Examiner's action and allowance of the present application are respectfully requested and are believed to be appropriate.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Commissioner determine that an extension of time is required in order to render this response timely and/or complete, a formal request for an extension of time, under 37 C.F.R. §1.136(a), is herewith made in an amount equal to the time period required to render this response timely and/or complete. The Commissioner is authorized to charge any required extension of time fee under 37 C.F.R. §1.17 to Deposit Account No. 19-0089.

If there should be any questions concerning this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
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Reg. 31,438

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